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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/523,379 | 03/10/2000 | Naoto Matsunami | H-907 | 6045 |

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EXAMINER

TRAN, PHILIP B

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2155 | 4 |

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|---------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/523,379 | MATSUNAMI ET AL. |
| | Examiner Philip B Tran | Art Unit 2155 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 March 2000.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.

4) Interview Summary (PTO-413) Paper No(s). _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-9 and 14-17 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hoes et al (Hereafter, Hoes), U.S. Pat. No. 5,941,972.

Regarding claim 1, Hoes teaches a computer system comprising of more than one computer and a storage subsystem to which said computers are connected and said storage subsystem having more than one storage unit (i.e., workstations and storage devices) [see Fig. 1], management table which registers information to manage said storage units accessible by each of said multiples of computers, and control unit to control the access to said storage units by said computers according to the information

registered in said management table (i.e., routing table and mapping table that control and manage access to the storages) [see Abstract and Col. 4, Lines 1-65 and Col. 7, Lines 18-26].

Regarding claims 2-3, Hoese further teaches said management table maintains identity information to identify said storage unit permitted to be accessed by each of said computers corresponding to the addressing information to identify each of said computers and each of said computers is equipped with, memory means storing user management table showing the correspondence between an identity information inputted during user log-in process and said addressing information, and storage means to maintain the addressing information which is defined according to said identity information inputted during said user log-in process as the addressing information of the said computer to be used when said computer accesses said storage subsystem [see Col. 4, Lines 1-36 and Col. 6, Line 12 – Col.7, Line 49].

Regarding claims 4-5, Hoese further teaches in the computer system recited in claim 3, said identity information is the user identifier to identify each user and the environment identifier which identifies the operational environment of each computer in the system user [see Col. 7, Lines 27-65].

Regarding claim 6, Hoese further teaches the computer system recited in claim 2 is further equipped with management console (i.e., management station 76 and storage

router 56) which is connected to said storage subsystem and has user management table showing the correspondence between identity information which is inputted into each computer during said user log-in process and said addressing information, wherein said management console recognizes a storage unit to be permitted to be accessed by said computer, according to said identity information transferred from each computer during the user log-in process, and sets information into said management table according to the result of said identification [see Figs. 2-3 and Col. 4, Lines 1-65 and Col. 6, Line 12 – Col.7, Line 49].

Claim 7 is rejected under the same rationale set forth above to claim 3.

Regarding claims 8-9, Hoes further teaches in the computer system recited in claim 7, said storage subsystem sets the information in said management table in response to said request and said request is transferred via a communication channel different from those used when said computers access data stored in said storage subsystem [see Col. 7, Lines 7, Lines 7-49].

Claim 14 is rejected under the same rationale set forth above to claim 1.

Claim 15 is rejected under the same rationale set forth above to claims 2 and 3.

Claim 16 is rejected under the same rationale set forth above to claim 6.

Claim 17 is rejected under the same rationale set forth above to claim 7.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 10-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoese et al (Hereafter, Hoese), U.S. Pat. No. 5,941,972 in view of Wolff, U.S. Pat. No. 6,185,601.

Regarding claims 10-11, Hoese does not explicitly teach in the computer system recited in claim 2, said storage units have shared storage unit which is shared by at least two computers and private storage unit which is used exclusively by only one computer and said shared storage unit stores operating system and/or application

programs which are commonly used by said at least two computers and said private storage unit stores specific information to operate said operating system and/or application programs in each computer. However, the use of shared and none-shared units in the memory storages by multiple nodes is well-known in the art as disclosed by Wolff [see Fig. 5D]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement different partitions of storages because it would have enabled different nodes to access different authorized sections of data or setting information.

5. Claims 12-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoese et al (Hereafter, Hoese), U.S. Pat. No. 5,941,972 in view of Wolff, U.S. Pat. No. 6,185,601.

Regarding claims 12-13, Hoese and Wolff do not explicitly teach in a computer system recited in claim 10, said storage subsystem is equipped with cache memory unit to store partial copy of data to be stored in said storage units, and said controller controls data stored in said shared storage unit to be resident in said cache memory unit and said management table contains the set information to specify storage unit from which data is made to be resident in said cache memory unit, and said controller performs said control according to said setting information. However, the use of cache memory unit in the storage subsystem having a controller is well-known in the art as disclosed by Wolff [see Col. 55, Lines 37-54]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement cache

because it would have enabled for the data to be retrieved from the local memory in order to save time and reduce bandwidth instead of accessing from the remote storages.

Other References Cited

6. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

- A) Sanada et al, U.S. Pat. No. 6,484,245.
- B) DeKoning et al, U.S. Pat. No. 6,567,889.
- C) Kobayashi et al, U.S. Pat. No. 5,905,847.
- D) Carter et al, U.S. Pat. No. 6,148,377.

7. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (703) 308-8767. The Group fax phone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached on (703) 308-6662.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

PBT
Philip B. Tran
Art Unit 2155
Sept 15, 2003

Alam
HOSAIN ALAM
ADVISORY PATENT EXAMINER